

Art Unit: 1795

/PATRICK RYAN/

Supervisory Patent Examiner, Art Unit 1795 **DETAILED ACTION**

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ken Moore on September 30, 2008.

The application has been amended as follows:

1. Claim 2 has been replaced with the following:

-- A method for manufacturing a wound electrode group wherein an electrode stack is wound around winding cores to form a wound electrode group, the electrode stack being formed by laminating a strip of positive electrode plate, a strip of negative electrode plate, and a pair of separators interposed therebetween so as to cover both surfaces of one of the positive and negative electrode plates, the method comprising:

setting a spacer having predetermined dimensions at one or a plurality of locations between two adjacent turns of the electrode stack halfway in the process of winding the electrode stack and winding them, and

removing the winding cores and the spacer after fixing a winding end of the electrode stack with a fixing member after the completion of the winding process,

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wherein the electrode stack is wound into the electrode group such that a difference L in length between each turn of two adjacent inner and outer turns satisfies $L = 2t\pi + (W \times k)$, where t is a thickness of the electrode stack, W is a maximum diameter of a cross section of the wound electrode group to be formed by winding the electrode stack, and k is a coefficient that is preset in accordance with expansion coefficients of active materials of the positive and negative electrode plates during battery use; and the spacer has a thickness that achieves a total sum of the differences L.--

2. Claim 3 has been canceled.
3. In claim 4 at line 2, "claim 3" has been changed to --claim 2--.

Remarks

This Office action is responsive to applicant's amendment filed June 18, 2008.

By entry of the examiner's amendment, claims 1, 2 and 4-8 are pending.

Allowable Subject Matter

Claims 1, 2 and 4-8 are allowed.

The following is an examiner's statement of reasons for allowance: the prior art does not teach or suggest the instant invention regarding a wound electrode group having a difference L in length between each turn of two adjacent inner and outer turns which satisfies $L = 2t\pi + (W \times k)$. The examiner concedes with applicant's assertion that the prior art relied upon, that to Miller et al., do not disclose or suggest taking into account an expansion coefficient k, preset in

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accordance with expansion coefficients of active materials of the positive and negative electrode plates, for its wound electrode group.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian Mercado whose telephone number is (571) 272-1289. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

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